

US EPA National Air Toxics Monitoring Program

Sharon Nizich, Monitoring and Quality Assurance Group, OAQPS Air Toxics Implementation Workshop, Cary NC April 8–11, 2002



Program Background

- Guided by a steering committee of STAPPA/ALAPCO, EPA and state senior officials, the National Air Toxics Monitoring Program is in its second year of projects.
- PURPOSE: To leverage all available resources for design of a national toxics monitoring network.
- FUNDING: \$3 million has been allocated each year so far - fy2000, fy2001, fy2002.



FY2000 Projects:

- Four large projects:
 - Providence, Detroit, Tampa, and Seattle
- Six smaller city/rural projects:
 - Barcelenta and San Juan Puerto Rico
 - Keeney Knob, West Virginia (mountainous area)
 - Rio Rancho NM
 - Cedar Rapids, IA
 - Grand Junction, CO
 - San Jacinto CA



Project Completions:

- January/February 2002: Tampa, Seattle, Cedar Rapids, and San Jacinto)
- Second quarter 2002: Detroit, Grand Junction, and Providence
- Third quarter 2002: Rio Rancho NM, Puerto Rico, and Keeney Knob, WV
- Equipment/procurement issues caused delays



FY2001 Projects

- Guidance issued February 2001 allowed more flexibility for monitoring projects – approximately 30 states/locals received funding.
- Data will roll into the study in CY2003.



FY2002 Projects - Guidance issued March 1, 2002

- Ten initial trends sites being created with limited funds Located at PM2.5 speciation sites and including aethalometers.
- Complete LADCO data analysis of fy2000 pilot projects, final report due spring 2003
- 40 states/locals to receive \$40k each to augment their existing toxics monitoring
- Seattle, Tampa, and Keeney Knob receive additional funds to complete the study



FY2002 Trends Selections

- Roxbury, MA
- Providence RI (former pilot site)
- NYC
- Washington DC
- Decatur, GA
- Detroit, MI (former pilot site)
- Deer Park, TX
- St. Louis, MO
- Bountiful, UT (outside Salt Lake City)
- San Jose, CA (pending)
- Seattle, WA (former pilot site)



FY2003 Projects

- Funding between 3 and 6.5 million.
- More trends sites will be created data analysis work will give clues to their siting.
- Methods development with ORD continuing.
- NATA "model to monitor" comparisons to be completed.
- Quality assurance for trends network in place.



FY2002/03 Activities

- Steering Committee convenes this summer to discuss long range planning for network.
- Inter-laboratory comparison study to assess precision and uncertainty
- Begin work on technical guidance documents/QA program.
- Second Data Analysis Workshop in Chicago fall of 2002 to discuss final pilot data results/recommendations for overall network design.



Parallel Study on Data Analysis

LADCO conducted a \$500k data analysis project using Battelle to analyze currently operating monitors (300) nationwide for clues on average annual concentrations, spatial and temporal variability.

•Preliminary results: Most compounds are less than MDL with exception of:

Benzene, acrolein, formaldehyde and chromium compounds



Preliminary Data Analysis Findings

- The mobile signature is prevalent
- The toxics program will be a combination of a minimal national trends network and a broader program that allows state/local agencies freedom to address their issues (hot spots, environmental justice, etc.)
- The national network will be planned in conjunction with the overall National Monitoring Strategy.